

CLAIM AMENDMENTS

1 1. (currently amended) A fenestrated asymmetric
2 intracardiac device for the completion of total cavopulmonary
3 anastomosis through cardiac catheterization, the device comprising
4 a bifurcated tubular conduit formed by a first lower section and a
5 second upper section both centered on and extending a common warped
6 axis, the first section being a tubular mesh covered at least in
7 some parts by an impermeable polymer with a curvature between
8 35°-45° and having

9 a lower end of substantially circular cross-sectional
10 shape with a diameter between 16-20 mm, [[and]]

11 an upper end having a progressively flattened and a
12 substantially oval cross-sectional shape, the upper end and lower
13 end both being of substantially the same cross-sectional area along
14 their full axial lengths, and

15 ~~the first section having~~ a wall formed with at least one
16 closable fenestration that connects an interior of the conduit with
17 the exterior,

18 the second upper section being a tubular mesh covered at
19 least partially by an impermeable polymeric material and having a
20 cross-sectional shape that is oval and tapers upward to a diameter
21 of between 10-13 mm, the second section bifurcating upward into two
22 branches one of which is longer than the other, extends along the
23 warped axis, and is of substantially circular and uniform cross-
24 sectional shape, the other branch being formed with a short

25 laterally projecting extension of circular cross-sectional shape
26 with a diameter between 10-13 mm, the branches forming with the
27 conduit a distorted "Y", each branch having a mesh of thread
28 partially covered by an impermeable polymeric material and being
29 formed unitarily with the second upper section, the conduit being
30 between 60-75 mm long overall, the one branch being between 18-25
31 mm long, and the other branch being between 4-8 mm long,
32 the short branch having a wall that intercepts between
33 50%-70% of blood flowing up through the tubular conduit from its
34 lower end, the lower end being constructed for connection with a
35 lower vena cava and a hepatic vena with the upper and lower
36 sections of the tubular conduit lodged inside the right atrium, one
37 branch being tightly lodged inside a left pulmonary artery and
38 forming an obstruction with regard to a main pulmonary artery, the
39 other branch being lodged at a base of a right pulmonary artery.

1 2. (currently amended) The fenestrated asymmetric
2 intracardiac device according to claim 1, ~~characterized in that~~
3 wherein the first lower section and the second upper section form a
4 one-piece tubular body made at least partially of a series of
5 threads forming a mesh.

1 3. (currently amended) The fenestrated asymmetric
2 intracardiac device according to claim 1, ~~characterized in that~~
3 wherein the first lower section [[,]] has a mesh part that is
4 independent of and that can telescope in the second upper section,
5 the first section being axially deployable and settable in the
6 second section, whereby the first section is of variable length .

1 4. (currently amended) The fenestrated symmetric
2 intracardiac device according to claim 1, ~~characterized in that~~
3 wherein the first lower section has a mesh made of more resistant
4 filaments than the second section so that first lower section is of
5 less flexibility than the second upper section.

1 5. (currently amended) The fenestrated asymmetric
2 intracardiac device according to claim 1, ~~characterized in that~~
3 wherein the lower end of first section has a mesh structure without
4 polymeric cover and permeable by the blood flow that flows up from
5 a lower vena cava and hepatic vena.

1 6. (currently amended) The fenestrated asymmetric
2 intracardiac device according to claim 1, ~~characterized in that~~
3 wherein the one branch of the bifurcation is formed by a mesh made
4 of threads covered by an impermeable polymeric material, the one
5 branch forming with the second upper section a tubular wall
6 impermeable to blood flow, the other branch not being covered by
7 the impermeable material and being permeable.

1 7. (currently amended) The fenestrated asymmetric
2 intracardiac device according to claim 1, ~~characterized in that~~
3 wherein an elastically deformable mesh material made of linked
4 metallic threads at least partially covered by
5 polytetrafluoroethylene, forms all of the device.